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EXAMINER

ANGWIN, DAVID PATRICK

ART UNIT	PAPER NUMBER
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3729

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,990	Applicant(s) SWAB, MICHAEL	
	Examiner DAVID P. ANGIN	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. §112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-26 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically:

- a. **Claim 11** recites the following limitations that are vague, indefinite, and confusing:
 - “a control program for a type of feeder mechanism from a plurality of control programs” (claim 11, lines 12-13) – It is unclear as to whether the invention includes one control program or multiple control programs. It appears as though the invention includes one control program that is selected from a plurality of control programs, but the claims do not make this clear. In addition, it appears as though there is one control program assigned to a “type of feeder mechanism,” however, it is unclear as to what the control program that is assigned to the “type of feeder mechanism” actually controls. Please be more precise with the claim language.
- b. **Claims 11 and 19** recite the following limitations that are vague, indefinite, and confusing (as mapped to claim 11):
 - “control programs for feeder mechanisms of different manufacturers” (claim 11, lines 13-14) – It is unclear as to whether a “different manufacturer” is a different corporation, subdivision, plant location, operator, or feeder mechanism design. Please be more precise with the claim language.

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c. **Claims 24-26** recite the following limitations that are vague, indefinite, and confusing (as mapped to claim 24):

- “different external feeder connectors” (claim 24, line 2) – It is unclear as to whether a “different external feeder connector” includes merely a replacement external feeder connector or a different style or type of external feeder connector. Please be more precise with the claim language.

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) that forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically taught or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. § 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Endo et al* (EP Patent 1 251 725).

Regarding **claim 1**:

- a. *Endo et al* discloses the following in his reference:
- i. a carriage (Fig. 1, item 3) to which a feeder plate mechanism (Figs. 1 and 2-6, item 2) is mounted, wherein a feeder plate mechanism provides external feeder connectors (Fig. 4, item 39, and Fig. 3,

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item 78) from a surface mount machine (Fig. 4, items 23 and 33) to the feeder plate mechanism; and

- ii. a plurality of feeder mechanisms (Fig. 1, item 7) that are received by said feeder plate mechanism, wherein said feeder mechanisms provide internal feeder connectors (Fig. 2, item 19) from said feeder plate mechanism to said plurality of feeder mechanisms, and wherein said feeder plate mechanism adapts said external feeder connectors to said internal feeder connectors (Fig. 4, item 23 to item 19).

- b. *Endo et al* may not expressly disclose in his reference that said **carriage** provides external feeder connectors from a surface mount machine to the feeder plate mechanism.

- i. However, the advantage of designing external feeder connectors on the carriage to connect a feeder plate mechanism to a surface mount machine is to more conveniently connect and disconnect the feeder plate mechanism from the surface mount machine due to the carriage being more easily accessible than the back side of the feeder plate mechanism. Thus, it would have been obvious to design external feeder connectors on the carriage to connect a feeder plate mechanism to a surface mount machine to more conveniently connect and disconnect the feeder plate mechanism from the surface mount machine due to the carriage being more easily accessible than the back side of the feeder plate mechanism.

Regarding **claim 2**:

- a. In addition to the limitations in claim 1, *Endo et al* discloses the following in his reference:

- i. said external feeder connectors comprise pneumatic and electrical connections (Fig. 4, items 23 and 33; 50:10-16).

Regarding **claim 3**:

- a. In addition to the limitations in claim 1, *Endo et al* discloses the following in his reference:
 - i. said internal feeder connectors comprise pneumatic and electrical connections (Fig. 2, items 19 and 23 and 33; 50:10-16).

Regarding **claim 4**:

- a. In addition to the limitations in claim 1, *Endo et al* discloses the following in his reference:
 - i. a switch within the surface mount machine is configured to enable an operator to select a type of feeder mechanism within said interface device (25:21-24; Fig. 1, *the examiner notes that this figure shows a central processing unit attached to the surface mount machine item 1 and further remarks that a chip mounting head would contain a software switch to indicate the appropriate component feeder to select based upon the type of component demanded by the program*).

Regarding **claim 5**:

- a. In addition to the limitations in claim 1, *Endo et al* discloses the following in his reference:
 - i. positioning pins within said interfacing device align components coupled by said internal feeder connectors (Fig. 3, item 76) and said external feeder connectors (Fig. 4, item 29).

Regarding **claim 6**:

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- a. In addition to the limitations in claim 1, *Endo et al* discloses the following in his reference:
 - i. said feeder plate mechanism comprises a top plate assembly used to couple said feeder plate mechanism to the surface mount machine (Figs. 2 and 4, item 11).

Regarding **claim 7**:

- a. In addition to the limitations in claim 1, *Endo et al* discloses the following in his reference:
 - i. said carriage comprises a tape dump operable to catch spent feeder tape expended by one of the feeder mechanisms (Fig. 1, item 10).

Regarding **claim 8**:

- a. In addition to the limitations in claim 1, *Endo et al* discloses the following in his reference:
 - i. said carriage comprises rolling members that are configured to enable an operator to easily reposition the interfacing device to and from the surface mount machine (Fig. 6, item 41; see *wheels*).

Regarding **claim 9**:

- a. In addition to the limitations in claim 1, *Endo et al* discloses the following in his reference:

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- i. said feeder plate mechanism comprises one or more locks to secure said feeder mechanisms within said feeder plate mechanism (Fig. 4, item 27).

Regarding **claim 10**:

- a. In addition to the limitations in claim 1, *Endo et al* discloses the following in his reference:
 - i. said carriage comprises a frame of adjustable height (Fig. 1, see *carriage with adjustable vertical arms*).

Regarding **claim 11**:

- a. *Endo et al* discloses the following in his reference:
 - i. mounting a feeder plate mechanism (Figs. 1 and 2-6, item 2) to a carriage (Fig. 1, item 3), wherein a feeder plate mechanism provides external feeder connectors (Fig. 4, item 39, and Fig. 3, item 78) from a surface mount machine (Fig. 4, items 23 and 33) to the feeder plate mechanism;
 - ii. connecting a plurality of feeder mechanisms (Fig. 1, item 7) to said feeder plate mechanism, wherein said feeder mechanisms couple to said feeder plate mechanism via internal feeder connectors (Fig. 2, item 19), and wherein said feeder plate mechanism adapts said external feeder connectors to said internal feeder connectors (Fig. 4, item 23);
 - iii. coupling said carriage to the surface mount machine (Fig. 1); and
 - iv. selecting via a switch within the surface mount machine the type of feeders contained within said feeder plate mechanism (25:21-24; Fig. 1, *the examiner notes that this figure shows a central processing unit attached to the surface mount machine item 1 and*

further remarks that a chip mounting head would contain a software switch to indicate the appropriate component feeder to select based upon the type of component demanded by the program).

- b. *Endo et al* may not expressly disclose in his reference that said **carriage** provides external feeder connectors from a surface mount machine to the feeder plate mechanism.
 - i. However, the advantage of designing external feeder connectors on the carriage to connect a feeder plate mechanism to a surface mount machine is to more conveniently connect and disconnect the feeder plate mechanism from the surface mount machine due to the carriage being more easily accessible than the back side of the feeder plate mechanism. Thus, it would have been obvious to design external feeder connectors on the carriage to connect a feeder plate mechanism to a surface mount machine to more conveniently connect and disconnect the feeder plate mechanism from the surface mount machine due to the carriage being more easily accessible than the back side of the feeder plate mechanism.
- c. In the alternative, *Endo et al* discloses the following in his reference:
 - i. mounting a feeder plate mechanism (Figs. 1 and 2-6, item 2) to a carriage (Fig. 1, item 3, and Fig. 4, item 4), wherein a feeder plate mechanism provides external feeder connectors (Fig. 4, item 39, and Fig. 3, item 78) from a surface mount machine (Fig. 4, items 23 and 33) to the feeder plate mechanism;
 - ii. connecting a plurality of feeder mechanisms (Fig. 1, item 7) to said feeder plate mechanism, wherein said feeder mechanisms couple to said feeder plate mechanism via internal feeder connectors (Fig. 2, item 19), and wherein said feeder plate mechanism adapts said external feeder connectors to said internal feeder connectors (Fig. 4, item 23);
 - iii. coupling said carriage to the surface mount machine (Fig. 1); and

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- iv. selecting via a switch within the surface mount machine the type of feeders contained within said feeder plate mechanism (25:21-24; Fig. 1, *the examiner notes that this figure shows a central processing unit attached to the surface mount machine item 1 and further remarks that a chip mounting head would contain a software switch to indicate the appropriate component feeder to select based upon the type of component demanded by the program*).

Regarding **claim 12**:

- a. In addition to the limitations in claim 11, *Endo et al* discloses the following in his reference:
 - i. said external feeder connectors comprise pneumatic and electrical connections (Fig. 4, items 23 and 33; 50:10-16).

Regarding **claim 13**:

- a. In addition to the limitations in claim 11, *Endo et al* discloses the following in his reference:
 - i. positioning pins within said interfacing device align components coupled by said internal feeder connectors (Fig. 3, item 76) and said external feeder connectors (Fig. 4, item 29).

Regarding **claim 14**:

- a. In addition to the limitations in claim 11, *Endo et al* discloses the following in his reference:
 - i. said feeder plate mechanism comprises a top plate assembly used to couple said feeder plate mechanism to the surface mount machine (Figs. 2 and 4, item 11).

Regarding **claim 15**:

- a. In addition to the limitations in claim 11, *Endo et al* discloses the following in his reference:
 - i. said carriage comprises a tape dump operable to catch spent feeder tape expended by one of the feeder mechanisms (Fig. 1, item 10).

Regarding **claim 16**:

- a. In addition to the limitations in claim 11, *Endo et al* discloses the following in his reference:
 - i. said carriage comprises rolling members that are configured to enable an operator to easily reposition the interfacing device to and from the surface mount machine (Fig. 6, item 41; see *wheels*).

Regarding **claim 17**:

- a. In addition to the limitations in claim 11, *Endo et al* discloses the following in his reference:
 - i. said feeder plate mechanism comprises one or more locks to secure said feeder mechanisms within said feeder plate mechanism (Fig. 4, item 27).

Regarding **claim 18**:

- a. In addition to the limitations in claim 11, *Endo et al* discloses the following in his reference:

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- i. said carriage comprises a frame of adjustable height (Fig. 1, see *carriage with adjustable vertical arms*).

Regarding **claim 19**:

- a. *Endo et al* discloses the following in his reference:

- i. a carriage (Fig. 1, item 3) to which a feeder plate mechanism (Figs. 1 and 2-6, item 2) is mounted, wherein a feeder plate mechanism provides external feeder connectors (Fig. 4, item 39, and Fig. 3, item 78) from a surface mount machine (Fig. 4, items 23 and 33) to the feeder plate mechanism, and wherein said external feeder connectors comprise pneumatic and electrical connections (Fig. 4, items 23 and 33; 50:10-16);
- ii. a plurality of feeder mechanisms (Fig. 1, item 7) that are received by said feeder plate mechanism, wherein said feeder mechanisms provide internal feeder connectors (Fig. 2, item 19) from said feeder plate mechanism to said plurality of feeder mechanisms, wherein said internal feeder connectors comprise pneumatic and electrical connections (Fig. 4, items 23 and 33; 50:10-16), wherein said feeder plate mechanism adapts said external feeder connectors to said internal feeder connectors (Fig. 4, item 23), and wherein mechanical stops (Fig. 2, item 7a; *the examiner notes that the illustration shows the cassette abutting the feeder plate mechanism*) and positioning pins (Fig. 3, item 76) secure said feeder mechanisms within said feeder plate mechanism; and
- iii. a means for selecting a type of feeder mechanism contained within said interface device (25:21-24; Fig. 1, *the examiner notes that this figure shows a central processing unit attached to the surface mount machine item 1 and further remarks that a chip mounting head would contain a software switch to indicate the appropriate component feeder to select based upon the type of component demanded by the program*).

- b. *Endo et al* may not expressly disclose in his reference that said **carriage** provides external feeder connectors from a surface mount machine to the

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feeder plate mechanism, and wherein said external feeder connectors comprise pneumatic and electrical connections.

- i. However, the advantage of designing external feeder connectors on the carriage to connect a feeder plate mechanism to a surface mount machine is to more conveniently connect and disconnect the feeder plate mechanism from the surface mount machine due to the carriage being more easily accessible than the back side of the feeder plate mechanism. Thus, it would have been obvious to design external feeder connectors on the carriage to connect a feeder plate mechanism to a surface mount machine to more conveniently connect and disconnect the feeder plate mechanism from the surface mount machine due to the carriage being more easily accessible than the back side of the feeder plate mechanism.
- c. In the alternative, *Endo et al* discloses the following in his reference:
 - i. a carriage (Fig. 1, item 3, and Fig. 4, item 4) to which a feeder plate mechanism (Figs. 1 and 2-6, item 2) is mounted, wherein a feeder plate mechanism provides external feeder connectors (Fig. 4, item 39, and Fig. 3, item 78) from a surface mount machine (Fig. 4, items 23 and 33) to the feeder plate mechanism, and wherein said external feeder connectors comprise pneumatic and electrical connections (Fig. 4, items 23 and 33; 50:10-16);
 - ii. a plurality of feeder mechanisms (Fig. 1, item 7) that are received by said feeder plate mechanism, wherein said feeder mechanisms provide internal feeder connectors (Fig. 2, item 19) from said feeder plate mechanism to said plurality of feeder mechanisms, wherein said internal feeder connectors comprise pneumatic and electrical connections (Fig. 4, items 23 and 33; 50:10-16), wherein said feeder plate mechanism adapts said external feeder connectors to said internal feeder connectors (Fig. 4, item 23), and wherein mechanical stops (Fig. 2, item 7a; *the examiner notes that the illustration shows the cassette abutting the feeder plate mechanism*) and positioning pins (Fig. 3, item 76) secure said feeder mechanisms within said feeder plate mechanism; and
 - iii. a means for selecting a type of feeder mechanism contained within said interface device (25:21-24; Fig. 1, *the examiner notes that this*

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figure shows a central processing unit attached to the surface mount machine item 1 and further remarks that a chip mounting head would contain a software switch to indicate the appropriate component feeder to select based upon the type of component demanded by the program).

Regarding **claim 20**:

- a. In addition to the limitations in claim 19, *Endo et al* discloses the following in his reference:
 - i. said carriage comprises a tape dump operable to catch spent feeder tape expended by one of the feeder mechanisms (Fig. 1, item 10);
 - ii. said carriage comprises rolling members that are configured to enable an operator to easily reposition the interfacing device to and from the surface mount machine (Fig. 6, item 41; *see wheels*);
 - iii. said carriage comprises a means for adjusting a height of said carriage (Fig. 1, *see carriage with adjustable vertical arms*).

Regarding **claim 21**:

- a. In addition to the limitations in claim 8, *Endo et al* discloses the following in his reference:
 - i. said rolling members are casters (Fig. 10, item 41; *the examiner notes that the wheels in the illustration appear to be casters*).

Regarding **claim 22**:

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- a. In addition to the limitations in claim 16, *Endo et al* discloses the following in his reference:
 - i. said rolling members are casters (Fig. 10, item 41; *the examiner notes that the wheels in the illustration appear to be casters*).

Regarding **claim 23**:

- a. In addition to the limitations in claim 20, *Endo et al* discloses the following in his reference:
 - i. said rolling members are casters (Fig. 10, item 41; *the examiner notes that the wheels in the illustration appear to be casters*).

Regarding **claim 24**:

- a. In addition to the limitations in claim 1, *Endo et al* may not expressly disclose that the external feeder connectors are configured to be interchangeable with different external feeder connectors to connect the feeder plate mechanism to a different surface mount machine.
 - i. However, *Endo et al* discloses a feeder plate mechanism that can be disconnected from surface mount machine (Fig. 1). The advantage of interchanging a different feeder plate mechanism including different external feeder connectors with a surface mount machine is to replace a broken feeder plate mechanism. Therefore, it would have been obvious to interchange a different feeder plate mechanism including different external feeder connectors with a surface mount machine to replace a broken feeder plate mechanism.

Regarding **claim 25**:

- a. In addition to the limitations in claim 11, *Endo et al* may not expressly disclose in his reference exchanging the external feeder connectors with different external feeder connectors to connect the feeder plate mechanism to a different surface mount machine.
- i. However, *Endo et al* discloses a feeder plate mechanism that can be disconnected from surface mount machine (Fig. 1). The advantage of interchanging a different feeder plate mechanism including different external feeder connectors with a surface mount machine is to replace a broken feeder plate mechanism. Therefore, it would have been obvious to interchange a different feeder plate mechanism including different external feeder connectors with a surface mount machine to replace a broken feeder plate mechanism.

Regarding **claim 26**:

- a. In addition to the limitations in claim 19, *Endo et al* may not expressly disclose that the external feeder connectors are configured to be interchangeable with different external feeder connectors to connect the feeder plate mechanism to a different surface mount machine.
- i. However, *Endo et al* discloses a feeder plate mechanism that can be disconnected from surface mount machine (Fig. 1). The advantage of interchanging a different feeder plate mechanism including different external feeder connectors with a surface mount machine is to replace a broken feeder plate mechanism. Therefore, it would have been obvious to interchange a different feeder plate mechanism including different external feeder connectors with a surface mount machine to replace a broken feeder plate mechanism.

Response to Arguments

Applicant's arguments filed 9/8/08 have been fully considered but they are not persuasive.

First, the applicant argues that *Endo et al* fails to teach a carriage that provides external feeder connectors from a surface mount machine to the feeder plate mechanism. More specifically, the applicant argues that “the Examiner recognizes that *Endo* does not disclose a carriage that ‘provides external feeder connectors from a surface mount machine to the feeder plate mechanism’ as recited in claims 1, 11, and 19” (applicant’s argument, 9:12-14). However, the examiner disagrees. The applicant does not utilize the examiner’s full language. The examiner stated that “*Endo et al* does not **expressly** disclose...” (examiner’s first action, 3:8; emphasis added). In Figs. 1-2 and 4-6, *Endo et al* suggests that the carriage provides movement via the wheels so that external feeder connectors (air hose opposing connectors items 39 and 23)) on the feeder plate mechanism and surface mount machine can be joined (see also 13:45-51). The applicant has not yet specified the location of the external feeder connectors, but merely states that “said carriage provides external feeder connectors from...” (claim 1, line 5). The language utilized by the applicant does not mean that the external feeder connectors are located on the carriage. In the same way, Fig. 4 (items 11, 13, and 33) shows the carriage providing movement so that the surface mount machine connects with the feeder plate mechanism. Also in the same way, Figs. 5-6 show positioning pins (item 29) that position the feeder plate mechanism into the surface mount machine. Finally, in a different way, Figs. 5-6 show a guide slope (item 82) on the carriage that

guides the feeder plate mechanism into surface mount machine. Therefore, the examiner maintains the rejection.

Second, the applicant argues that it would not have been obvious to modify *Endo et al* to design a carriage that provides external feeder connectors from a surface mount machine to the feeder plate mechanism. However, the examiner disagrees. The carriage is more easily accessed, connected, and disconnected with relation to the external feeder connectors from the side rather than from the back side of the feeder plate mechanism. This is shown in *Endo et al*. More specifically, it is clearly obvious that the operator need not pull the entire carriage, feeder plate mechanism, and feeder mechanism away from the back side of the surface mount machine if the external feeder connectors are place on the side of the carriage. Instead, the operator need merely connect or disconnect the appropriate external feeder connection. Therefore, the examiner maintains the rejection.

Third, the applicant argues that Endo fails to teach "selecting, via a switch within the surface mount machine, a control program for a type of feeder mechanism from a plurality of control programs..." (claim 11) or the claim 19 equivalent. However, the examiner disagrees. Fig. 1 shows a CPU. It is well known in the art of component mounting that computers control the component feeding and mounting operations. In particular, computers are necessary to quickly calculate component locations from the feeder mechanism all the way to placement on the circuit board. Therefore, the examiner maintains this rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David P. Angwin, whose telephone number is (571) 270-3735. The examiner can normally be reached on 7:30 AM - 5 PM (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant, can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. Dexter Tugbang/
Primary Examiner
Art Unit 3729

DPA